



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0631/S, REVISION 1**

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive materials.

1. Source Identification - AEA Technology QSA, Inc. Model No. X.3 (Manufactured on or after July 17, 1980).
2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate exterior dimensions are 22.5 mm (0.89 in.) in diameter and 31.2 mm (1.23 in.) in length. Minimum wall thickness of the outer encapsulation is 1.2 mm (0.05 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc Drawing No. RBA11006, Rev. A.
3. Radioactive Contents - No more than either 185.0 GBq (5.0 Ci) of Americium-241 or 185.0 GBq (5.0 Ci) of Plutonium-238. The Am-241 and Pu-238 are in oxide form and mixed with a beryllium powder and pressed into a solid pellet.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires June 15, 2008. On February 28, 2005, this certificate supersedes, in its entirety, all previously issued revisions of USA/0631/S.

¹ "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

² Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

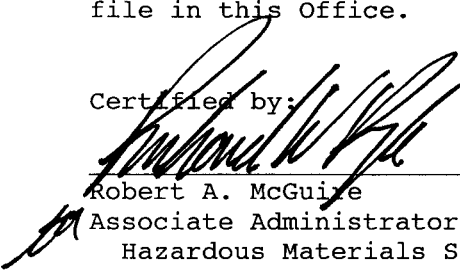
(- 2 -)

CERTIFICATE USA/0631/S, REVISION 1

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated November 29, 2004 submitted by AEA Technology QSA, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified by:

DEC -2 2004

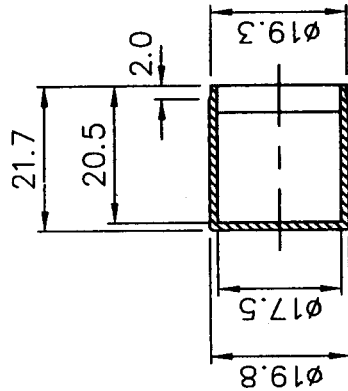
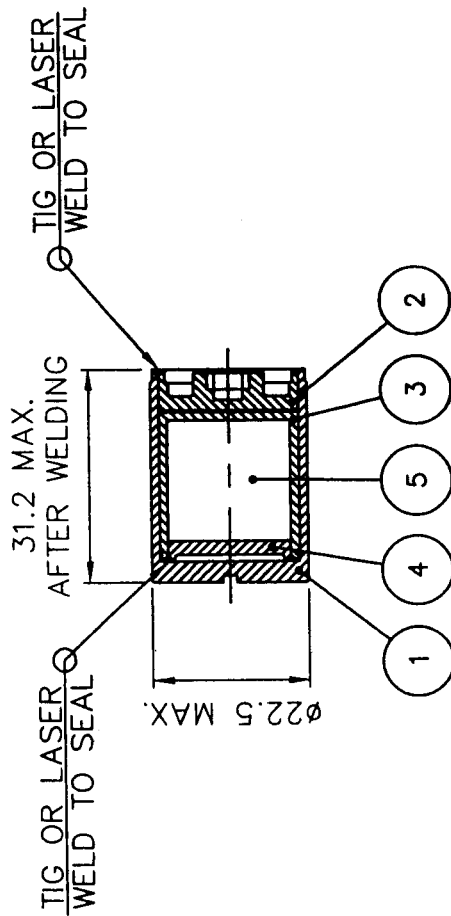


Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

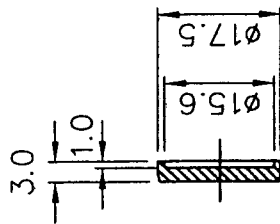
(DATE)

Revision 1 - Issued to specify manufacturing dates.

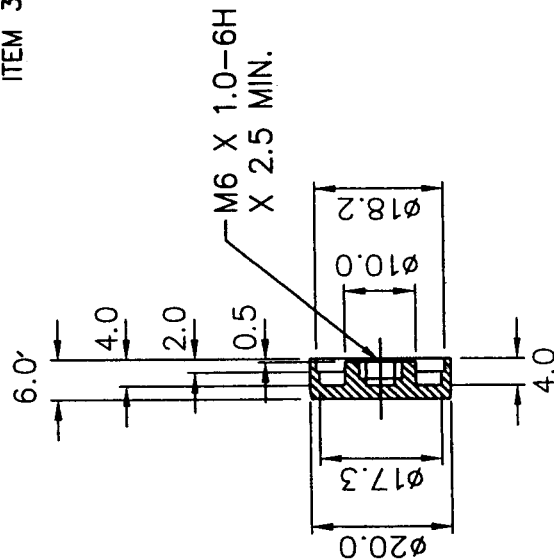
ITEM No.	DESCRIPTION	QTY.
1	SHEATH BODY STAIN.STL.	1
2	SHEATH LID STAIN.STL.	1
3	CELL BODY STAIN.STL.	1
4	CELL LID STAIN.STL.	1
5	ACTIVE MATERIAL	AR



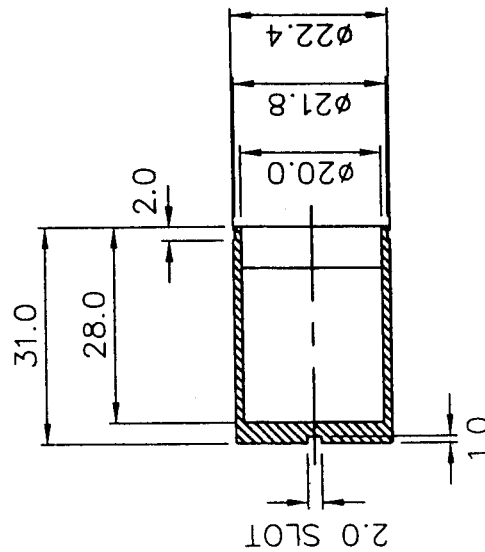
ITEM 3



ITEM 4



ITEM 2



ITEM 1

APPROVALS	DATE
<i>[Signature]</i>	16 Apr 03
<i>[Signature]</i>	16 Apr 03

APPROVALS

DIMENSIONS IN MILLIMETERS
UNLESS OTHERWISE STATED TOLERANCES:

X	±0.5	N/A
XX	±0.1	INTERNAL
XXX	±0.05	EXTERNAL
ANGULAR	±5°	



40 NORTH AVE, BURLINGTON, MA 01803

DESCRIPTIVE
DRAWING

TITLE X3 CAPSULE ASSEMBLY

SIZE	DWG. NO.	SCALE	SHEET 1 OF 1	REV
A	RBA11006	NONE		A

ERF # 477